



May 16, 1963

File
OX PE

STATINTL

TO:

FROM:

SUBJECT: Window Group Activities - 5/10/63 - 5/16/63

All the fabrication associated with vacuum welding the second optical 14 x 20 window was completed and the window was tested. It tested absolutely tight.

A non-optical vacuum window was also fabricated. All the vacuum welding fabrication was completed and it also was tested absolutely tight. The purpose of this unit is to aid us in our processing and in-house testing; and it may be used as an instrumented window in the field test program.

We are making preparations to anneal the optical units in a vacuum furnace. After this annealing the outgasing stage of the fabrication process will begin.

Assembly of the non-vacuum windows is progressing somewhat behind our original schedule because man power is diverted from this task to the vacuum window tasks as required. However, we anticipate no problem in delivering two of these units by June 15.

STATINTL

A preliminary but detailed test plan for [REDACTED] window tests^{of} both the vacuum and non-vacuum configurations was prepared and submitted to interested people for comment.

The delay in go-ahead of purchasing the welder from Taylor-Winfield has caused some difficulty. Acceptance tests which were previously scheduled for June 15 have now been delayed. The leak detector (presently at Taylor-Winfield) and personnel which are required at Taylor-Winfield for acceptance tests are needed at the [REDACTED] at the time that present acceptance tests are scheduled.

STATINTL

STATINTL

PFF:lc

May 9, 1963

STATINTL

TO: 

FROM: 

SUBJECT: Window Group Activities - 5/3/63 - 5/9/63

All the fabrication associated with vacuum welding the first optical quality 14 x 20 vacuum window was completed and the window was tested. It tested absolutely tight.

We have begun construction on the second optical unit.

Components for the two non-vacuum units are nearly all accumulated, and assembly is scheduled for next week.

 STATINTL

PFF:lc

May 2, 1963

STATINTL

TO: [REDACTED]

FROM: [REDACTED]

SUBJECT: Window Group Activities - 4/26/63 - 5/2/63

The production of our first full sized optical quality vacuum window is proceeding on schedule. The optical quality fused silica and BK-7 was ultrasonically welded to the frame. Visual appearance of the weld indicates that the glazing attachment was accomplished satisfactorily. The curved evacuation tube was attached, but the attachment was not good. The tube was subsequently removed, and some adjustments are being made before it is reattached. We still anticipate being able to leak check this unit with a sensitivity that will assure us that we have no objectionable leak rates, within one to two weeks.

We are proceeding very well in all phases of components for both the vacuum and the improved non-vacuum window.

The glazings for the improved non-vacuum window are scheduled for completion by the end of next week. It is anticipated that final assembly of the improved non-vacuum windows will begin after that time.

Miscellaneous activities were conducted on the following:

- a. Spare parts lists required for [REDACTED]
- b. Analysis of the optimum gas to use in the improved non-vacuum window
- c. Determination of a test program
- d. Design of shipping containers for vacuum and non-vacuum windows.

STATINTL

PFF:lc

[REDACTED]